## REMARKS

Favorable reconsideration and allowance of this application are requested.

By way of the amendment instructions above, the claims pending herein have been amended for purpose of clarity and to address the Examiner's rejection advanced under 35 USC §112, second paragraph. Claim 19 has been added and is directed toward the types of pulp that were originally recited in claim 3.

The only issues remaining to be resolved in this application are the Examienr's art-based rejections of record. In this regard, claim 1 attracted a rejection under 35 USC §103(a) as allegedly being obvious over Kaiser in view of Sampi et al, while Vikio or Makkonen were combined with Kaiser and Sampi et al to reject claims 2-5 and 7 under that same statutory provision. Meinander has also been combined with Kaiser and Sampi et al so as to separately reject claim 6 under 35 USC §103(a).

With regard to the rejection of claim 1, applicant notes that the Examiner asserts that, according to Kaiser, paper pulp is fed through line 52 from the white water tank (wire pit) 36 into a gas separation tank and therefrom to a fan pump (32) to the head box (12). The pulp is fed into the gas separation tank with the pump (50). Further, the Examiner asserts that the pulp of Kaiser is at a low consistency as it is the fine particles that pass through the paper web as pulp is drained through the wire (14) on the paper machine (10).

Even if it is not shown in Kaiser, the pulp flowing in line 52 contains also other components than fine particles from the paper machine. Specifically, it is well known that upstream of the white water tank there is typically provided a blend chest for blending stock components. The pulp fed to the paper machine normally consists of different kinds of materials, e.g. chemical pulp, mechanical pulp, broke, etc. From the blend chest the pulp is fed to a machine chest and further to the white water tank. This is shown in the enclosed drawing (Figure 8, page 137, Papermaking Part 1, 2000). It is clear that also additional pulp has to be fed to the system. The system cannot work if only the fines from the paper machine were circulated in the system. The applicant has

described this detail so that there would not be any misunderstanding regarding the short circulation of a paper machine.

Sämpi mentions that a pulp stock of low consistency can be pumped by means of centrifugal pumps or propeller pumps. However, Sämpi does not relate to the short circulation process of a paper machine, but to mixing chemicals and washing water into the pulp during bleaching and washing at a pulp mill. The Examiner argues that our invention to use a propeller pump in connection with the short circulation is obvious over Sämpi. The evidence therefor is that no one has disclosed the present applicant's invention whereby a propeller pump is used *after* the white water tank in the short circulation at a paper mill. The present invention brings about substantial advantages as disclosed, for example, at page 6, lines 16 to 28 of the applicant's International Application WO 0011265.

With regard to claims 2-5 and 7, the Examiner asserts that Vikiö teaches the separate treatment of different pulp fractions in the short circulation. Applicant disagrees. What Vikiö teaches is the treatment of a reject from the vortex cleaning plant (14 in Fig. 1 of the present application) after which treatment the reject can be returned to the process. In the Vikiö process, the reject is dispersed (48 in Fig. 2 of Vikiö) into finer fractions for reuse. However, Vikiö does not teach how other raw material fractions for the paper pulp to be fed to a paper machine are treated. Vikiö does not teach that other material needed for paper making, such as fresh pulp, secondary pulp and/or broke are treated in their own cleaning stations. This kind of system brings about several advantages as disclosed, for example, at page 9 of the applicant's International Application WO 0011265.

Makkonen has been cited for an alleged teaching of separating the pulp from the white water tank to the gas separation tank into separate fractions and then separately treating each of the fractions. However, the present applicant does not claim that the pulp material is first formed by mixing different raw material components (fresh pulp, broke etc.), fed to the white water tank and then separated into different fractions.

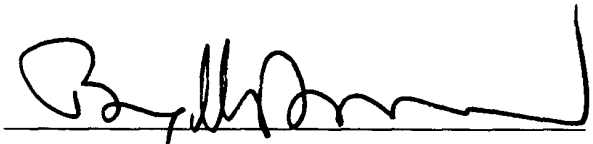
Instead, according to the present applicant's claimed process, the raw material components (fresh pulp, broke etc) are treated separately *before* they are mixed (see page 9, line 19 to page *5,* line 12 of the International Application WO 0011265). Therefore, Makkonen does not disclose or suggest the presently claimed invention.

As to claim 7, applicant notes that Meinander's system differs essentially from the system disclosed in US 5,567, 278 (which corresponds to FI 89728 described on page 2 of the present application (WO 0011265)). In this regard, applicant notes that at column 5, line 52-55, it is stated that the main fiber process is marked with a fat line passing through equipment number 10, 11, 12, 30 and 40. In column 6, it is described that in the mixer 12, stock is diluted to a consistency suitable for sorting in the centrifugal cleaner 30. Thus, Meinander treats the pulp in the cleaning means. There is no gas separation tank in the Meinander system, but air is separated from white water in pumps 20 (col. 6, line 36-37). The Meinander reference is therefore not particularly relevant because it does not even have the same elements as required by the present invention defined by claim 7. As such, withdrawal of Meinander as a reference against the present invention is also in order.

Every effort has been made to advance prosecution of this application to allowance. Early official notice of the same is therefore solicited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: 

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## APPENDIX I

### Marked-Up Version of Amended Claims Pursuant to 37 CFR §1.121(c)

1. (Amended) A method of pretreating paper pulp, in which method paper pulp, either totally or at least the main part of it, is fed by means of a gas separation tank feed pump (12, 120) from a white water tank (10) into a gas separation tank (16) and from there by means of a fan pump (18) further to the head box (22) of the paper machine, and wherein [characterized in that] the paper pulp is fed into the gas separation tank (16) by means of a propeller pump (12).

2. (Amended) A paper pulp pretreatment method according to claim 1, wherein [characterized in that] prior to being transferred into the gas separation tank (16), of the fractions forming the paper pulp at least the filler fraction and the fiber fraction are treated separately in their own screening stages in order to remove impurities from said fractions, after which said fractions are combined to form paper pulp.

3. (Amended) A paper pulp pretreatment method according to claim 1, wherein [characterized in that] various sorts of fiber pulp [(e.g. VF, DIP, BR)] contained in the paper pulp are treated separately each in its own screening stage.

4. (Amended) A paper pulp pretreatment method according to claim 2, [characterized in that] wherein centrifugal cleaning is used in said screening stages.

5. (Amended) A paper pulp pretreatment method according to claim 2, [characterized in that] wherein a pressure screen is used in said screening stages.

6. (Amended) A paper pulp pretreatment method according to claim 1, [characterized in that] wherein the paper pulp is fed by means of a propeller pump (12) into the gas separation tank (16) directly from the white water tank (10) without employing special cleaning.

7. A paper pulp pretreatment method according to claim 1, wherein [characterized in that] the paper pulp is transferred into the gas separation tank (16) from a white water tank (100) located essentially at the machine level.